

Risk Management and Risk Perception in a Superfund Community

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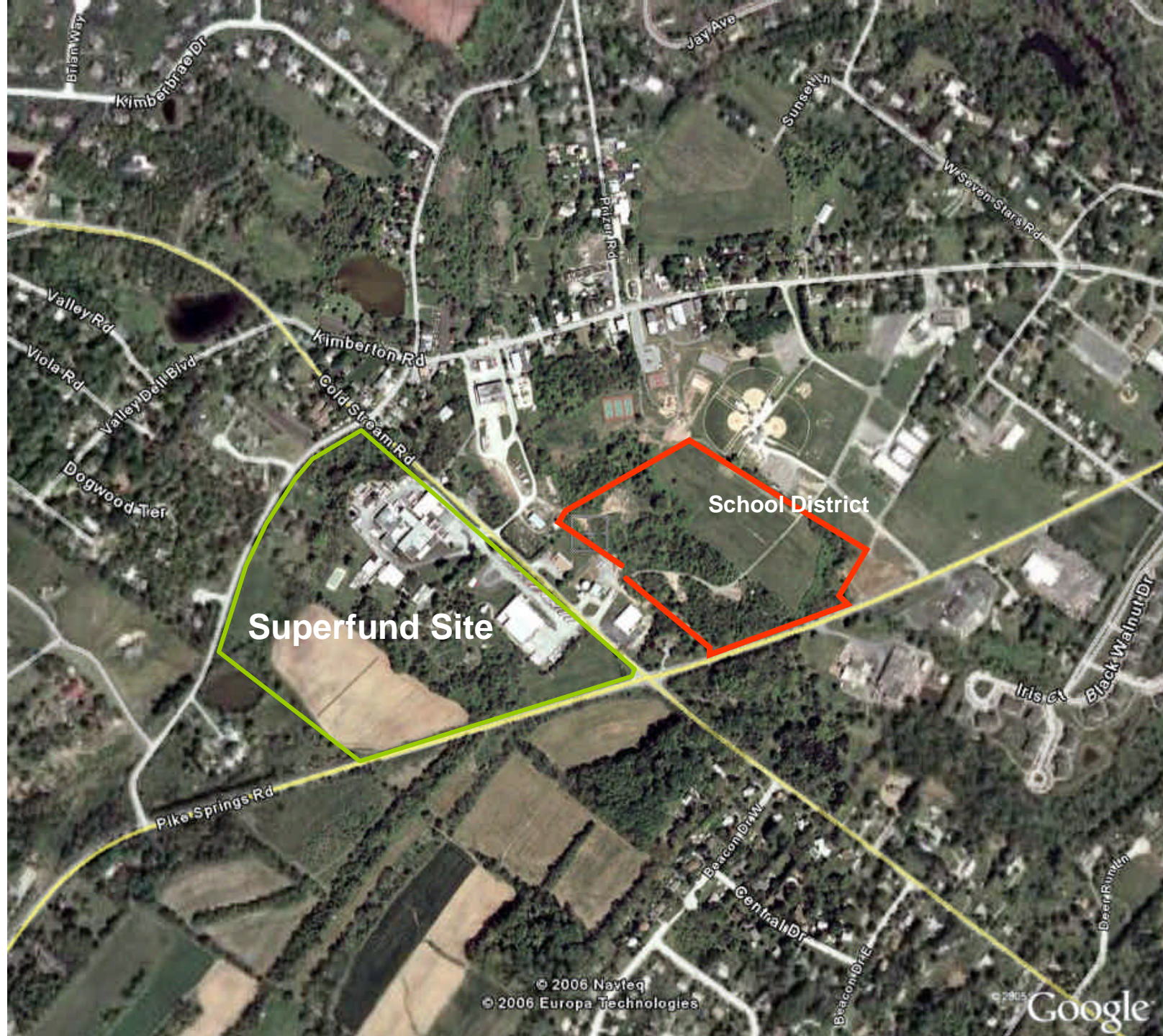
January 12-13, 2008

Overview

- Would you want your child to go to a school on a property with contaminated groundwater?
 - Risk Management
 - Risk Perception

Background

- School District
 - Purchased property across street from a Superfund site
 - Groundwater plume from Superfund Site under a portion of the school's property
 - Portion of school property - historically used as dump
 - Plan to build an elementary school



Superfund Site

School District

Superfund Site

- Environmental information
 - Groundwater remedy
 - Pump and treat system
 - Operated for 14 years
 - Groundwater conditions
 - TCE, DCE
 - Monitoring well on school property
 - Level of contamination



Kimberion Superfund Site
East Pikeland Township, Pennsylvania



Scale:
North Arrow: 0° 0' 0" N
Map Date: 01/17/2017
Map Author: PA DEP
Map Title: Kimberion Superfund Site
Map Scale: 1 inch = 1 mile
Map Projection: NAD 83
Map Datum: NAD 83
Map Units: Feet
Map Contour Interval: 100 feet
Map Contour Label: 100
Map Contour Color: Yellow
Map Contour Width: 2 pixels
Map Contour Style: Solid
Map Contour Join Style: Round
Map Contour Cap Style: Round
Map Contour Dash: None
Map Contour Weight: 2
Map Contour Color: Yellow
Map Contour Width: 2 pixels
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Map Contour Weight: 2

School District Actions

- Installed and tested shallow groundwater wells
- Soil samples
- Soil gas samples
 - School district consultant - indicated no risk
- Even though no evidence of VI, committed to vapor mitigation system in school building as conservative measure
- Consulted with EPA and PADEP
- Consultants – legal, environmental

Community Concerns

- First time many aware of Superfund site
- Concerned about vapor intrusion
- Concerned about the effectiveness of a VI mitigation system
- Very Conservative threshold for safety
- Who should they trust?

Community Response

- Asked intelligent questions
- Aware of vapor intrusion as a pathway
- Connections to the media
 - Issue covered by TV news
 - Articles in local paper
- Attended school board meetings

Perspective of Stakeholders

- Community
 - Wanted a very safe school
 - Wanted a reliable source of information
- School district
 - Followed procedures
- EPA
 - Consulting role – not advocate on issue
- Company operate Superfund site
 - Focus on cleanup, not reuse

Would you send your child to this elementary school?

- \$ millions spent on land and studies
- State-of-the-art school design
- State-of-the-art environmental controls
- Located on property with contaminated groundwater plume from an adjacent Superfund site

How do you think this concluded?

- A) school is going to be built
- B) school is not going to be built
- C) decision postponed until more information gathered

Final Result

School Board decided not to approve the construction of the elementary school

Challenges Faced by RPM

- Interviewed by media
- Making evaluation of VI with no building
- Did not know community response until faced with it
- Neutral role, not decision maker